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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,086	08/26/2003	James F. Bredt	ZCO-107CP2	5896

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/650,086

Applicant(s)

BREDT ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 33-76 is/are rejected.
- 7) ☒ Claim(s) 31 and 32 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/1/04 & 4/1/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 43, 46, 48-49, and 76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 43 recites an improper Markush group. In line 3 after “ester,” and before “ethoxylated”, delete “and” while in line 4 after “glycol,” and before “lecithin”, delete “of”.

Similarly, claims 46, 48, and 49 each also recite improper Markush groups. It is suggested that “and” is deleted after “starch” and before “hydrolyzed” in line 3 of claim 46 and after “fiber” in line 2 of claim 48. It is also suggested that “and” is inserted after “fiber” and before “alkyl” in line 2 of claim 49.

(b) Claim 49 discloses that the polymeric fiber is “alkyl or alkylene monomers of up to 8 carbon atoms”. It is not clear how a polymeric fiber is a monomer. Does this mean that the polymeric fiber is obtained from alkyl or alkylene monomers of up to 8 carbon atoms? Further, it is not clear what an alkyl or alkylene monomer is. Does this refer to monomers that contain alkyl or alkylene groups? Clarification is requested.

(c) Claim 76 discloses that the oil is selected from the group consisting of oleoyl alcohol, dodecyl alcohol, ..., and glycerol tributyrates, all of the above plus lodyne. The scope of the

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claim is confusing because it is not clear if the printing composition requires oil that is oleoyl alcohol, dodecyl alcohol, ..., or glycerol tributyrate and in addition must always include lodyne or if the oil is oleoyl alcohol, dodecyl alcohol, glycerol tributyrate, or lodyne. Clarification is requested.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 7, 23, 30, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Greul et al. (U.S. 5,649,277).

Greul et al. discloses three dimensional printing composition comprising 50% binder polymer and 50% filler such as copper powder (col.1, lines 8-15 and col.4, lines 35-42).

In light of the above, it is clear that Gruel et al. anticipate the present claims.

5. Claims 1-4, 7, 19, 21-22, 30, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Bredt (U.S. 5,660,621).

Bredt discloses three dimensional printing composition comprising 12-20% binder that is silica and includes polyethylene glycol catalyst and 0.2-5% citric acid, i.e. filler (col.1, lines 13-15, col.2, lines 1-10, col.3, lines 8-11 and 20-23, col.4, lines 21-23, and col.5, lines 35-36).

In light of the above, it is clear that Bredt anticipates the present claims.

6. Claims 1-5, 7-16, 20, 23-25, 30, 33-37, 39-40, 44-49, 66-67, and 72-75 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al. (U.S. 5,738,921).

Anderson et al. disclose composition comprising 30-70% gypsum having particle size of 0.05 μm – 2 mm, 1-60% binder including polysaccharide such as locust bean gum, protein such as gelatin, starch including gelatinized starch and dextrin, polymer such as polyvinyl alcohol, and cellulose gel wherein the binder includes mixtures of binders, 0.5-60% fiber such as cellulose fiber or glass fiber, 5-80% water, additional filler including silica or starch, and additives such as humectant, i.e. oil. There is also disclosed combination of inorganically filled mixture (i.e. filler, binder, and fiber) and water, i.e. corresponding to presently claimed kit (col.7, lines 8-18, col.22, lines 25-27, 38-46, and 52-60, col.22, line 66-col.23, line 2, col.23, lines 16-32, 36-37, and 40-45, col.24, line 66-col.25, line 4, col.25, lines 20-30 and 42-43, col.26, lines 30-50, col.27, lines 17-19 and 51-53, col.27, line 66-col.28, line 4, col.28, lines 15-20 and 34-39, and col.39, lines 44-48).

While there is no disclosure that the composition of Anderson et al. is a three dimensional printing composition as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that “if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of

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the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. three dimensional printing composition, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art composition and further that the prior art structure which is a composition identical to that set forth in the present claims is capable of performing the recited purpose or intended use.

In light of the above, it is clear that Anderson et al. anticipate the present claims.

7. Claims 1-4, 7, 9, 11-13, 23-25, 30, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Leppard et al. (U.S. 5,965,776).

Leppard et al. disclose composition for stereolithography, i.e. used to produce three dimensional objects by printing, wherein the composition comprises 40-90% binder polymer such as methyl cellulose, gypsum, accelerator, polyvinyl pyrrolidone, i.e. second binder or adhesive, and glass fibers (col.13, lines 10-16 and 25-27, col.16, lines 35-37, col.17, lines 25-26 and 33, and col.19, lines 50-53).

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In light of the above, it is clear that Leppard et al. anticipate the present claims.

8. Claims 1-5, 7, 23-24, 26, 29-30, 33-35, 37, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. (U.S. 5,591,563).

Suzuki et al. disclose composition for stereolithography, i.e. used to produce three dimensional objects by printing, wherein the composition comprises 100 parts resin, i.e. binder, 50-400 parts inorganic solids that have particle size of 0.1-50 μm such as alumina, silica, calcium carbonate, or aluminum hydroxide, and 10-100 parts inorganic whiskers such as aluminum fiber that have 20 μm length and carbon fibers that have length of 1-70 μm . It is calculated that the composition comprises 17-63% binder, 20-78% inorganic solids, and 20-40% whiskers (col.1, lines 8-9, col.2, lines 40-41, col.5, lines 24-47, and col.8, lines 30-35).

In light of the above, it is clear that Suzuki et al. anticipate the present claims.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 68-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (U.S. 5,738,921) in view of Mulvey et al. (U.S. 4,310,996).

The disclosure with respect to Anderson et al. in paragraph 6 above is incorporated here by reference.

The difference between Anderson et al. and the present claimed invention is the requirement in the claims of accelerator.

Mulvey et al., which is drawn to composition comprising gypsum, disclose that gypsum possesses impurities that have major effect on its performance such as cure rate and disclose the use of accelerator such as alum in order to control the cure rate of the gypsum (col.4, lines 38-62).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use accelerator in the composition of Anderson et al. in order to control the cure rate of gypsum, and thereby arrive at the claimed invention.

12. Claims 50-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (U.S. 5,738,921) in view of Mulvey et al. (U.S. 4,310,996).

Anderson et al. disclose composition comprising 30-70% gypsum having particle size of 0.05 μm – 2 mm, 1-60% binder including polysaccharide such as locust bean gum, protein such as gelatin, starch including gelatinized starch and dextrin, polymer such as polyvinyl alcohol, and cellulose gel wherein the binder includes mixtures of binders, 0.5-60% fiber such as cellulose fiber or glass fiber, 5-80% water, additional filler including silica or starch, and additives such as humectant, i.e. oil (col.7, lines 8-18, col.22, lines 25-27, 38-46, and 52-60, col.22, line 66-col.23, line 2, col.23, lines 16-32, 36-37, and 40-45, col.24, line 66-col.25, line 4, col.25, lines 20-30 and 42-43, col.26, lines 30-50, col.27, lines 17-19 and 51-53, col.27, line 66-col.28, line 4, col.28, lines 15-20 and 34-39, and col.39, lines 44-48).

The difference between Anderson et al. and the present claimed invention is the requirement in the claims of (a) accelerator/retarder and (b) that the composition is three dimensional printing composition.

With respect to difference (a), Mulvey et al., which is drawn to molding composition comprising gypsum, disclose that gypsum possesses impurities that have major effect on its performance such as cure rate and disclose the use of accelerator such as alum and retarder such as citrate in order to control the cure rate of the gypsum (col.4, lines 38-62).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use accelerator and retarder in the composition of Anderson et al. in order to control the cure rate of gypsum, and thereby arrive at the claimed invention.

With respect to difference (b), while there is no disclosure that the composition of Anderson et al. is a three dimensional printing composition as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that "if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. three dimensional printing composition, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art composition. Given that Anderson et al. in combination with Mulvey et al. disclose composition as presently claimed, it is clear that the composition would be capable of performing the intended use, i.e. three

dimensional printing composition, presently claimed as required in the above cited portion of the MPEP, and thus, one of ordinary skill in the art would have arrived at the claimed invention.

13. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gruel et al. (U.S. 5,649,277), Bredt (U.S. 5,660,621), or Suzuki et al. (U.S. 5,591,563).

Gruel et al., disclose method of three dimensional printing comprising providing a three dimensional printing composition comprising 50% binder (col.1, lines 8-15, col.3, lines 24-40, and col.4, lines 35-42).

Bredt disclose method of three dimensional printing comprising providing a three dimensional printing composition comprising 12-20% binder (col.1, lines 10-16, col.2, lines 1-10, col.3, lines 8-11 and 20-23, col.4, lines 21-23, and col.5, lines 35-36).

Suzuki et al. disclose method of three dimensional printing comprising providing a three dimensional printing composition comprising 17-63% binder (col.1, lines 8-9, col.2, lines 40-41, col.5, lines 24-27, col.5, line 66-col.6, line 13, and col.8, lines 30-35).

There is no disclosure in Gruel et al., Bredt, or Suzuki et al. of providing instructions for using the composition.

However, it would have been within the skill level of one of ordinary skill in the art to recognize that in order to effectively and properly utilize the three dimensional printing composition especially for those that have never used or are not familiar with such composition, instructions must be provided.

Thus, it therefore would have been obvious to one of ordinary skill in the art to provide instructions with the three dimensional printing compositions of Gruel et al., Bredt, or Suzuki et

al. in order that the composition is properly and effectively utilized resulting in the production of three dimensional object, and thereby arrive at the claimed invention.

14. Claims 1-8, 12-13, 15, 17, 23, 26-30, 33, 37-39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cima et al. '680 (U.S. 5,518,680).

Cima et al. '680 disclose three dimensional printing composition comprising binder or adhesive that is polymer having diameter of 15-50 μm and filler that is polymer such as ethylene vinyl acetate or polyester, protein such as albumin, polysaccharide such as lactose, or inorganic material such as calcium carbonate or lactose (col.2, lines 29-32 and 41, col.4, lines 5-8, col.6, lines 40-65, col.7, lines 4-10, and col.8, lines 35-40).

The difference between Cima et al. '680 and the present claimed invention is the requirement in the claims of the amount of binder.

Cima et al. '680 is silent with respect to the amount of binder utilized.

However, col.4, lines 2-3 of Cima et al. '680 disclose that the binder is used to bond the powdered material, i.e. filler, present in the composition in order to produce one layer of object that is built up layer by layer.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to choose amount of binder, including that presently claimed, in order to ensure that the powder is strongly bound together and thus, can effectively produce three dimensional object, and thereby arrive at the claimed invention.

15. Claims 18-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cima et al. '680 as applied to claims 1-8, 12-13, 15, 17, 23, 26-30, 33, 37-39, and 41 above, and further in view of Cima et al. '380 (U.S. 5,387,380).

The difference between Cima et al. '680 and the present claimed invention is the requirement in the claims of adhesive or filler that is organic acid.

Cima et al. '380, which is drawn to three dimensional printing composition, disclose the use of citric acid in order to allow gelation of the binder in order quickly lock the binder onto place to prevent bleeding of the binder which would lead to a loss of definition of the part surface and part dimensions (col.11, lines 33-47).

In light of the motivation for using citric acid disclosed by Cima et al. '380 as described above, it therefore would have been obvious to one of ordinary skill in the art to use citric acid in the composition of Cima et al. '680 in order to prevent bleeding of the binder, and thereby arrive at the claimed invention.

16. Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cima et al. '680 as applied to claims 1-8, 12-13, 15, 17, 23, 26-30, 33, 37-39, and 41 above, and further in view of Bredt (U.S. 5,851,465).

The difference between Cima et al. '680 and the present claimed invention is the requirement in the claims of printing aid.

Bredt, which is drawn to three dimensional printing composition, disclose the use of propylene glycol as humectant in order to retard drying of the ink and prevent clogging of printer (col.4, lines 48-53).

In light of the motivation for using printing aid, i.e. humectant, disclosed by Bredt as described above, it therefore would have been obvious to one of ordinary skill in the art to use propylene glycol in the composition of Cima et al. '680 in order to produce ink that will not dry out and thus, clog the printer nozzles, and thereby arrive at the claimed invention.

17. Claims 1-7, 9, 11-13, 22-24, 30, 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sachs et al. (U.S. 5,204,055).

Sachs et al. disclose three dimensional printing composition comprising binder having diameter of 15-50 μm that is cellulose or inorganic material such as silica or silicate and metal powder that has particle size of 20 μm or greater or ceramic fiber (col.1, lines 6-10, col.2, lines 59-67, col.3, lines 50-59, col.4, lines 1-17, col.5, lines 24-26, col.7, lines 18-20, 34-37, and 45-51, col.8, lines 48-58, and col.9, lines 21-25).

The difference between Sachs et al. and the present claimed invention is the requirement in the claims of the amount of binder.

Sachs et al. is silent with respect to the amount of binder.

However, col.4, lines 15-17 and col.5, lines 39-50 of Sachs et al. disclose that the binder is utilized in order to allow the build up of parts layer by layer.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to choose amount of binder, including that presently claimed, in order to produce three dimensional printing composition that effectively produces three dimensional objects by building the object layer by layer, and thereby arrive at the claimed invention.

18. Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sachs et al. as applied to claims -7, 9, 11-13, 22-24, 30, 37, and 39 above, and further in view of Bredt (U.S. 5,851,465).

The difference between Sachs et al. and the present claimed invention is the requirement in the claims of printing aid.

Bredt, which is drawn to three dimensional printing composition, disclose the use of propylene glycol as humectant on order to retard drying of the ink (col.4, lines 48-53).

in light of the motivation for using printing aid, i.e. humectant, disclosed by Bredt as described above, it therefore would have been obvious to one of ordinary skill in the art to use propylene glycol in the ink of Sachs et al. in order to produce ink that will not dry out and thus, clog the printer nozzles, and thereby arrive at the claimed invention.

Allowable Subject Matter

19. Claims 31-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 31-32 would be allowable if rewritten in independent form as described above given that there is no disclosure in the "closest" prior art, i.e. Gruel et al. (U.S. 5,649,277), Bredt (U.S. 5,660,621), Suzuki et al. (U.S. 5,591,563), Leppard (U.S. 5,965,776), Anderson et al. (U.S. 5,738,921), Cima et al. '680 (U.S. 5,518,680), or Sachs et al. (U.S. 5,204,055), of binder that is polyvinylpyrrolidone copolymer with vinyl acetate.

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cima et al. '962 (U.S. 5,490,962), similar to Cima et al. '680 (U.S. 5,518,680) utilized above, disclose three dimensional printing composition comprising binder or adhesive that is polymer having diameter of 15-50 μm and filler that is polymer such as ethylene vinyl acetate or polyester, protein such as albumin, polysaccharide such as lactose, or inorganic material such as calcium carbonate or lactose.

Sachs et al. (U.S. 5,340,656), similar to Sachs et al. (U.S. 5,204,055) utilized above, disclose three dimensional printing composition comprising binder having diameter of 15-50 μm that is cellulose or inorganic material such as silica or silicate and metal powder that has particle size of 20 μm or greater or ceramic fiber.

Housholder (U.S. 4,247,508) disclose molding process for producing three dimensional article comprising plaster, however, there is no disclosure of amount of plaster utilized, accelerator, adhesive, or kit as presently claimed.

WO 97/11835 discloses three dimensional printing process, however, given the effective filing date of the reference, it is not applicable against the present claims under any subsection of 35 USC 102.

WO 98/09798 discloses three dimension printing composition comprising 10-50% adhesive such as sucrose, filler such as dextrose, 0-20% reinforcing fiber such as cellulose fiber, 0-30% stabilizing fiber such as cellulose fiber, 0-20% humectant, 0-30% printing aids, 0-1%

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flow rate enhanced, and water, however, given the effective filing date of the reference, it is not applicable against the present claims under any subsection of 35 USC 102.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
6/25/05